## **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings of claims in the application:

- 1. (Original): A method for modification of a DNA of a bacterial cell comprising in its genome a first attachment site recognized by a protein with Mx9 integrase activity, comprising introducing a Mx9 transformation system into the cell, said system comprising
- a) a gene encoding a protein with Mx9 integrase activity protein operably linked to a promoter active in the host cell, and
- b) a DNA vector comprising a second attachment site recognized by the integrase protein, which may be the same as the first attachment site.
  - 2. (Original): The method of claim 1 wherein the cell is *Myxococcus* or *Sorangium*.
- 3. (Original): The method of claim 1 wherein the protein has a sequence at least substantially identical to SEQ ID NO:2.
- 4. (Original): The method of claim 3 wherein the protein has a sequence of SEQ ID NO:2.
- 5. (Original): The method of claim 4 wherein the protein is encoded by a gene comprising the sequence of SEQ ID NO:1.
- 6. (Original): The method of claim 1 wherein said first attachment site comprises SEQ ID NO:5.
  - 7. (Original): The method of claim 6 wherein said first attachment site is attB2.
- 8. (Original): The method of claim 1 wherein said second attachment site comprises SEQ ID NO:5.

- 9. (Original): The method of claim 3 wherein said first attachment site has been recombinantly introduced into the cell genome.
- 10. (Original): The method of claim 1 wherein said DNA vector further comprises an exogenous gene.
- 11. (Original): The method of claim 10 wherein the exogenous gene is selected from the group consisting of *prpE*, *accA*, *pccB*, *matB*, *matC* and beta-galactosidase genes.
- 12. (Original): The method of claim 6 wherein the first and second attachment sites are comprised of identical sequences.
  - 13. (Original): The method of claim 2 wherein the cell is *Myxococcus xanthus*.
  - 14. (Original): The method of claim 13 wherein the cell produces an epothilone.
- 15. (Original): The method of claim 14, wherein the epothilone is selected from the group consisting of epothilone C and D.
- 16. (Currently amended): A bacterial host cell produced by the method of claim 10 a method for modification of a DNA of a bacterial cell comprising in its genome a first attachment site recognized by a protein with Mx9 integrase activity, said method comprising introducing a Mx9 transformation system into the cell, wherein said system comprises
- a) a gene encoding a protein with Mx9 integrase activity protein operably linked to a promoter active in the host cell, and
- b) a DNA vector comprising a second attachment site recognized by the integrase protein, which may be the same as the first attachment site.
- 17. (Currently amended): The cell of claim 16 wherein said that produces an epothilone selected from epothilone A, B, C, and D.
- 18. (Original): The cell of claim 17, wherein said exogenous gene is selected from the group consisting of *prpE*, *accA*, *pccB*, *matB* and *matC* genes.

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- 19. (New): The cell of claim 16 wherein said DNA vector further comprises an exogenous gene.
  - 20 (New): The cell of claim 16 that is Myxococcus or Sorangium.
- 21. (New): The cell of claim 16 wherein either or both of the first attachment site and the second attachment site comprises SEQ ID NO:5.